

Appl. No. 09/916,091
Amdt. Dated, March 3, 2005
Reply to Office Action of December 3, 2004

Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-10 (canceled)

Claims 11-31 (canceled)

Claim 32 (previously presented) An improved bi-rotational gear pump generally comprising a generally circular or annular gear housing defining a central cavity; adapted and sized to receive a pair of intermeshing gears carried axially by drive means, capable of rotating in a "cw" or "cww" direction and thereby capable of pumping liquid through said pump depending upon the rotation of said drive means, a pair of generally circular cover members situated concentrically in flush abutment, on either side of said gear housing, a pair of generally circular end-cap members in concentric flush abutment on either side of said cover members; said cover members and said end cap members each being machined so as to define together a plurality of interconnected, internal passageways, an inlet means for fluid leading to said pair of intermeshing gears, and two outlet means for pumped fluid and means for directing said fluid to one or other of said outlet means depending on the direction of rotation of said intermeshing gears.

Claim 33 (previously presented) The invention as claimed in Claim 32 wherein the series of connected internal passageways includes an array of ball valves which are constructed and arranged to open or close depending upon the rotational movement of the intermeshing gears and consequent movement of the fluid.

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Claim 34 (previously presented) The invention as claimed in Claim 33 and further comprising a plurality of valves located within said connected internal passageways and means for controlling said ball valves as to change the movement of said fluid through internal passageways.

Claim 35 (previously presented) The invention as claimed in Claim 34 and further comprising a pilot type piston located in at least one of the valves serving to open or close the valve in question.

Claim 36 (canceled)